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The Air Force Academy's Mouse



**Researchers weigh a Preble's
meadow jumping mouse.**

U.S. Air Force photos

Nearly a half century ago, the U.S. Air Force acquired 18,500 acres (7,485 hectares) along the Front Range of the Colorado Rocky Mountains for the site of its Air Force Academy. This once sparsely populated area has since become one of the fastest growing places in the United States. As a result, the Air Force Academy, like many military lands, is becoming an island of biodiversity within a sea of urban development.

The main animal of concern now at the Air Force Academy is the Preble's meadow jumping mouse (*Zapus hudsonius preblei*), a small brown rodent with a conspicuous dark dorsal band, large well-developed hind legs and feet, and an extremely long tail. This subspecies only occurs in foothill riparian systems from southeastern Wyoming to central Colorado in the North Platte, South Platte, and Arkansas River watersheds. In Colorado, biologists have documented the subspecies currently in seven counties, with one of the largest and most stable populations occurring at Monument Creek on the Air Force Academy.

The Academy commissioned the Colorado Natural Heritage Program (CNHP) to conduct a baseline inventory of small mammals at the facility in 1994. That survey resulted in capture of the Academy's first known Preble's meadow jumping mouse, which at that time was a listing candidate. Recognizing the rarity of the find and the implications for management, the Academy, in partnership with the CNHP, conducted an intensive survey in 1995 to identify the extent of the mouse's occupied habitat on Academy lands and provide a baseline population estimate. The study indicated that the Academy was home to

a significant mouse population and important contiguous habitat for the species along Monument Creek and its tributaries. As a result, the Academy entered into a partnership with the CNHP for an ongoing study of the mouse to provide the information necessary to develop management and conservation strategies. Field work began in the summer of 1997 and has continued every year since then. With the listing of the Preble's meadow jumping mouse as threatened in 1998, the U.S. Fish and Wildlife Service became a formal partner in the field research on the Academy grounds.

The Academy's natural resources manager is a member of the Preble's Meadow Jumping Mouse Science Advisory Team, a group of scientists and managers dedicated to compiling the best science available to support the conservation of the species throughout its range. An Academy representative also holds a position on the executive committee for a habitat conservation plan (HCP) under development for El Paso County, Colorado. Through the HCP process, the Academy will coordinate with nonfederal entities in the development of conservation strategies for the mouse on a regional basis.

At the request of the Service, the Academy's natural resources manager is representing the Air Force on the Preble's Meadow Jumping Mouse Recovery Team, which is charged with developing a plan to restore to the species to a secure status. When complete, the recovery plan will be incorporated into the Academy's Integrated Natural Resources Management Plan, and will provide the guidance and specific

conservation strategies for the mouse and its habitat on Academy lands.

The Air Force also has entered into a formal conservation agreement with the Service for management of the Preble's meadow jumping mouse and its habitat at the Academy. This agreement outlines a 5-year strategy to accommodate the maintenance and repair of existing Academy infrastructure within the species' habitat. The Academy then initiated formal consultation under section 7 of the Endangered Species Act on a programmatic basis for its conservation management plan and the conservation agreement. The biological opinion provided by the Service on the Academy's conservation management plan significantly reduced the regulatory burden on both the Academy and the Service by removing the need for section

7 consultations for each instance of regular maintenance.

The management approach taken by the Air Force Academy demonstrates the benefit of initiating inventories and developing management plans well before regulatory requirements demand compliance. By recognizing the conservation needs of this rare species early, the Academy was able to initiate research and management strategies 3 years prior to listing. This placed the Academy in a leadership role as conservation initiatives developed on both a regional and a rangewide basis.

Both the Air Force and the Service hope that the programmatic agreement concept developed in this process will have application throughout the country. It clearly has the added advantage of placing both the Air Force and the

Service in a partnership that recognizes a common conservation goal, rather than a strictly regulatory one. The benefits of such an approach mean easier compliance with the Endangered Species Act and better conservation for listed species.

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